

Motion and Sound

3-5 The student will demonstrate an understanding of how motion and sound are affected by a push and pull on an object and the vibration of an object (Physical Science)

3-5.1 Identify the position of an object relative to a reference point by using position terms such as “above,” “below,” “inside of,” “underneath,” or “on top of,” and a distance scale or measurement.

Taxonomy level: 1.1-A, B Remember Factual and Conceptual Knowledge

Previous/Future knowledge: In 1st grade (1-5.1), students identified the location of an object relative to another object. Students have not been introduced to the concepts of identifying positions and motions of objects with terms and measurements in previous grades. Students will further develop this concept of position in 5th grade (5-5.2) when they will summarize the motion of an object in terms of position, direction, and speed.

It is essential for students to know that the position of an object can be identified by using a reference point.

- Terms, such as, “above,” “below,” “inside of,” “underneath,” “on top of” can be used to describe its relative location to another object.
- *Distance* is the length between two locations or positions.
- The distance of a specific object to another object can be measured using meter tapes, sticks, or rulers.
- This distance can be recorded in meters or centimeters.

It is not essential for students to read or record distance in millimeters.

Assessment Guidelines:

The objective of this indicator is to *identify* the location or position of an object relative to a reference point; therefore, the primary focus of assessment should be to recognize the position of an object compared to that of another object using terms that show positions (including “above,” “below,” “inside of,” “underneath,” or “on top of,”) or a distance scale to measure the distance. However, appropriate assessments should also require students to *recognize* the location or position of an object compared to another object using terms listed above or a distance scale or measurement from a meter tape, stick, or ruler in meters and/or centimeters.